



Case No. BP0309US-CP1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appl. No. : 10/822,639

Confirmation No.:1937

Applicant(s) : Pappin et al.

Filed : 04/12/2004

TC/A.U. : 1654

Examiner : Marcela M. Cordero Garcia

For : Mixtures of Isobarically  
Labeled Analytes and  
Fragment Ions Derived  
Therefrom

Customer No. : 23544

CERTIFICATE OF MAILING	
I hereby certify that this correspondence is being deposited with the United States Postal Service with sufficient postage as <del>first</del> class mail in an envelope addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on	
Date of Deposit:	6-8-06
Signature:	
Type Name of Depositing Party: Patricia E. Tocci	

**INFORMATION DISCLOSURE STATEMENT**

Mail Stop Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Applicants submit herewith patents, publications or other information (listed on the attached Form PTO 1449) of which they are aware, which may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR §1.56.

This Information Disclosure Statement:

- (a) [ ] accompanies a new patent application submitted herewith.
- (b) [ ] is filed within three months after the filing date of the application or within three months after the date of entry of the national stage of a PCT application as set forth in 37 CFR §1.491.
- (c) [ ] as far as is known to the undersigned, is filed before the mailing date of a first Office action on the merits.
- (d) [ ] as far as is known to the undersigned, is filed before the mailing date of a first

Office action after the filing of a request for continued examination under § 1.114.

(e) [ x ] is filed after the first Office Action and more than three months after the application's filing date or PCT national stage date of entry filing but, as far as is known to the undersigned, prior to the mailing date of either a final action under §1.113, a notice of allowance under §1.311, whichever occurs first, and is accompanied by either the fee (\$180) set forth in 37 CFR §1.17(p) or a certification as specified in 37 CFR §1.97(e), as checked below. Should any fee be due, the U.S. Patent and Trademark Office is hereby authorized to charge Deposit Account No. 01-2213 in the amount of \$180.00 to cover the cost of this Information Disclosure Statement. Any deficiency or overpayment should be charged or credited to this deposit account. A duplicate of this sheet is enclosed.

(f) [ ] is filed after the mailing date of either a final rejection or a notice of allowance, but on or before the payment of the issue fee, and is accompanied by the fee (\$180) set forth in 37 CFR §1.17(i)(1) and a certification as specified in 37 CFR §1.97(e), as checked below. **This document is to be considered as a petition requesting consideration of the information disclosure statement.** The U.S. Patent and Trademark Office is hereby authorized to charge Deposit Account No. 01-2213 in the amount of \$180.00 to cover the cost of this Information Disclosure Statement. Any deficiency or overpayment should be charged or credited to this deposit account. A duplicate of this sheet is enclosed.

[If either of boxes (e) or (f) is checked above, the following "certification" under 37 CFR §1.97(e) may need to be completed.] The undersigned certifies that:

[ ] Each item of information contained in the information disclosure statement was first cited in a communication mailed from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this information disclosure statement.

[ ] No item of information contained in this information disclosure statement was cited in a communication mailed from a foreign patent office in a counterpart foreign application, and, to the knowledge of the undersigned after making reasonable inquiry, was known to any individual designated in 37 CFR §1.56(c) more than three months prior to the filing of this information disclosure statement.

A copy of the items on PTO Form 1449 that are not United States Publications:

are supplied herewith.  
 are not supplied because they were previously cited by or submitted to the Office

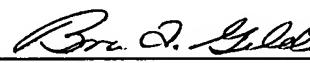
in prior application Serial No. \_\_\_\_\_, filed \_\_\_\_\_ and relied upon in this application for an earlier filing date under 35 USC §120.

While the information and references disclosed in this Information Disclosure Statement may be "material" pursuant to 37 CFR §1.56, it is not intended to constitute an admission that any patent, publication or other information referred to therein is "prior art" for this invention unless specifically designated as such.

In accordance with 37 CFR §1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made or that no other material information as defined in 37 CFR §1.56(a) exists. It is submitted that the Information Disclosure Statement is in compliance with 37 CFR §1.98 and MPEP §609 and the Examiner is respectfully requested to consider the listed references.

Respectfully submitted,

Date: June 8, 2006

  
\_\_\_\_\_  
Brian D. Gildea  
Attorney for Applicants  
Reg. No. 39,995  
Telephone: 508-383-7632  
Customer No.: 23544  
Applied Biosystems  
500 Old Connecticut Path  
Framingham, MA 01701 USA

O I P E 449A  
JUN 08 2006  
PATENT & TRADEMARK OFFICE

Please type a plus sign (+) inside this box. →

PTO/SB/08A (08-00)  
Approved for use through 10/31/2002. OMB 0651-0031  
U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449A/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

1

of

2

Complete if Known

Application Number	10/822,639
Filing Date	04/12/2004
First Named Inventor	Pappin, Darryl
Group Art Unit	1654
Examiner Name	Marcela M Cordero Garcia

Attorney Docket No. BP0309US-CP1

### U.S. PATENT DOCUMENTS

U.S. Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear
Number	Kind Code <sup>2</sup> (if known)			
7,045,296	B2	Applera Corp and Institute for Systems Biology	05/16/2006	

### FOREIGN PATENT DOCUMENTS

Cite No. <sup>1</sup>	Foreign Patent Document		Name of Patentee or Applicant of Cited Document	Date of Publication of Cited Document MM-DD-YYYY	Pages, Columns, Lines Where Relevant Passages or Relevant Figures Appear	T <sup>3</sup>
	Office <sup>3</sup>	Number <sup>4</sup>	Kind Code <sup>4</sup> (if known)			
	BS	WO03/056343	A	James, Peter	07/10/2003	
	BT	WO04/086050	A	Proteome Sciences	10/07/2004	
	BU	EP 0990047	B1	Qiagen Genomics	05/14/2003	

### OTHER ART - NON PATENT LITERATURE DOCUMENTS

Examiner Initials <sup>5</sup>	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	GK	Applied Biosystems Application Note iTRAQ Reagents: "Multiplex Protein Quantitation in <i>Saccharomyces cerevisiae</i> using iTRAQ Reagents with the QSTAR XL System and the 4700 Proteomics Discovery System" May 2004	
	GL	Bartlet-Jones, Michael et al, "Peptide Ladder Sequencing by Mass Spectrometry Using a Novel, Volatile Degradation Reagent", <i>Rapid Communications in Mass Spectrometry</i> , Vol. 8, 737-742 (1994)	
	GM	Gygi S P et al, "Quantitative Analysis of Complex Protein Mixtures Using Isotope-Coded Affinity Tags", <i>Nature Biotechnology</i> , vol. 17, no. 10, October 1999, pgs 994-999	
	GN	Huang, Yulin et al, "A Method for High Efficiency Peptide Sequencing Using Combined Enzymatic Digestion and Chemical Derivatization on MALDI MSMS", <i>Applied Biosystems Poster Number 1159, 6<sup>th</sup> International Symposium on Mass Spectrometry</i>	
Examiner Signature		Date Considered	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231. 108875\_1.DOC

Substitute for form 1449A/PTO				Complete if Known	
				Application Number	10/822,639
				Filing Date	04/12/2004
				First Named Inventor	Pappin, Darryl
				Group Art Unit	1654
				Examiner Name	Marcela M Cordero Garcia
Sheet	2	of	2	Attorney Docket No.	BP0309US-CPL

		in the Health and Life Sciences, August 24-28, 2003, San Francisco.	
	GO	Munchbach M et al: "Quantitation and Facilitated De Novo Sequencing of Proteins by Isotopic N-Terminal Labeling of Peptides with a Fragmentation-Directing Moeity", Analytical Chemistry, vol. 72, no. 17, 9/1/2000, pgs. 4047-4057	
	GP	Ross, Philip et al, "Investigation of Chemical Derivatization for Peptide CID Using LC-MALDI TOF MS/MS", Applied Biosystems Poster Number ThPF 250, ASMS Conference June 8 - June 12, 2003	
	GQ	Ross, Philip et al, "Multiplexed protein quantitation in <i>Saccharomyces cerevisiae</i> using amine-reactive isobaric tagging reagents", Molecular & Cellular Proteomics, December 2004, vol. 3, no. 12, pgs 1154-1169	
	GR	Roth, K.D. et al, "Charge Derivatization of Peptides for Analysis by Mass Spectrometry", Mass Spectrometry Reviews, John Wiley and Sons, vol. 17, no. 4, 1998, pgs. 255-274	
	GS	Sherman, Nicholas et al, "A Novel N-Terminal Derivative Designed to Simplify Peptide Fragmentation", 43 <sup>rd</sup> ASMS Conference on Mass Spectrometry and Allied Topics, 1995	
	GT	Zieske, L.R. et al, "Protein and Biomarker Quantitation Using iTRAQ Reagents - A Novel Set of Multiplexed Amine-Specific Tagging Reagents", 6 <sup>th</sup> Sienna Meeting: From Genome to Proteome, September 2004.	

Examiner Signature	Date Considered
--------------------	-----------------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Unique citation designation number. <sup>2</sup> See attached Kinds of U.S. Patent Documents. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>4</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>5</sup> Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231. 108875\_1.DOC